WHAT IS CLAIMED IS:

1. A method for determining an operational state of a system for filtering by-products generated during a media imaging operation, the method comprising:

collecting the by-products in an airflow;

channeling the airflow through at least one filtration element;

measuring a first flow rate of the airflow in a first location; and,

determining the operational state of the system based at least in part on a comparison of the first flow rate to at least one first threshold.

2. A method according to claim 1, comprising measuring a second flow rate of the airflow at a second location spaced apart from the first location.

3. A method according to claim 2, wherein determining the operational state of the system is based at least in part on a comparison of the second flow rate to at least one second threshold.

4. A method according to claim 2, wherein the first location is upstream from the filtration element and the second location is downstream from the filtration element.

5. A method according to claim 4, comprising determining an operational state of the filtration element based at least in part on the first and second flow rates.

6. A method according to claim 2, wherein the first location is upstream from the second location.

7. A method according to claim 6, comprising determining an operational state of a portion of the system between the first and second locations based at least in part on the first and second flow rates.

8. A method according to claim 7, comprising, in response to determining the operational state of the portion of the system between the first and second locations, signaling a potential existence of a blockage between the first and second locations.

9. A method according to claim 7, comprising, in response to determining the operational state of the portion of the system between the first and second locations, signaling a potential existence of an airflow leak within the system.

10. A method according to claim 7, comprising, in response to determining the operational state of the portion of the system between the first and second locations, signaling that the filtration element requires servicing or replacement.

11. A method according to claim 7, wherein the first location is proximate the imaging operation, determining the operational state of the portion of the system between the first and second locations, comprises comparing the first and second flow rates and, the method comprises, in response to the comparison, signaling a potential existence of a blockage proximate to the imaging operation.

12. A method according to claim 1, wherein determining the operational state of the system based at least in part on the comparison of the first flow rate to at least one first threshold comprises identifying a potential existence of at least one of: an airflow blockage in the system and an airflow leak in the system.

13. A method according to claim 1, wherein determining the operational state of the system based at least in part on the comparison of the first flow rate to at least one first threshold comprises determining whether the filtration element has reached a capacity.

14. A method according to claim 1, wherein measuring the first flow rate of the airflow in the first location comprises measuring pressure at one or more locations.

15. A method according to claim 14 wherein measuring the first flow rate comprises measuring a first pressure at a point where the airflow has a first cross-sectional area and a second pressure at a point where the airflow has a second cross-sectional area different from the first cross-sectional area.

16. A system for filtering by-products generated during a media imaging operation, the system comprising:

a filtration unit having an inlet and an outlet;

a collection nozzle coupled to the inlet and locatable proximate to the imaging operation for collecting the by-products;

an air mover connected to generate an airflow through the filtration unit and the collection nozzle;

a first sensor for generating a first signal indicative of a flow rate of the airflow in a first location; and,

a comparator configured to receive the first signal and to compare the first signal to at least one threshold to determine an operational state of the system.

17. A system according to claim 16, comprising means for communicating an indication of the operational state to a user.

18. A system according to claim 16, comprising a second sensor for generating a second signal indicative of a second flow rate of the airflow in a second location spaced apart from the first location.

19. A system according to claim 18 wherein the comparator is configured to receive the first and second signals and to determine an operational state of the system based at least in part on both the first and second signals.

20. A system according to claim 19, wherein the first location is proximate to the collection nozzle and the second location is proximate to the outlet and the comparator is configured to determine an operational state of the system which comprises at least one of:

a blockage of the collection nozzle;

a disconnected conduit between the collection nozzle and the inlet;

a leak in the system;

a malfunction of the air mover;

a filtration element in the filtration unit having reached a predetermined fraction of its capacity; and

a filtration element in the filtration unit having reached its capacity.

21. A system according to claim 19 wherein the second location is downstream relative to the first location and wherein the comparator is configured to determine an operational state of a portion of the system between the first and second locations, the operational state comprising at least one of:

a blockage of the collection nozzle;

a disconnected conduit between the collection nozzle and the inlet;

a leak in the system;

a malfunction of the air mover;

a filtration element in the filtration unit having reached a predetermined fraction of its capacity; and

a filtration element in the filtration unit having reached its capacity.

22. A system according to claim 16, wherein the sensor comprises a pressure transducer.

23. A system according to claim 16 wherein the first location is in the collection nozzle.

24. A system according to claim 18 wherein the first location is in the collection nozzle and the second location is downstream in the airflow from the filtering element.

25. A system according to claim 24 wherein the air mover is downstream from the filtering element, and the second location is in a conduit having a progressively decreasing cross-sectional area between the filtering element and the air mover.

26. A method for determining an operational state of a filtration element used within a system for filtering by-products generated during a media imaging operation, the method comprising:

collecting the by-products in an airflow;

channeling the airflow containing the by-products through the filtration element;

maintaining a count indicative of a remaining capacity of the filtration element in a memory device coupled to the filtration element; and

determining the remaining capacity of the filtration element based at least in part on the count.

27. A method according to claim 26 wherein the count comprises an indication of an area imaged during imaging operations involving the filtration element and a type of media.

28. A method according to claim 27 wherein determining the remaining capacity of the filtration element based at least in part on the count comprises multiplying the area imaged during imaging operations involving the filtration element and the type of media and a byproduct generation rate per unit area for the type of media and comparing the result to a maximum capacity of the filtration element.

29. A method according to claim 26, comprising:

predetermining a by-product generation rate per unit area for a specific media; and

adjusting the count based at least in part on the by-product generation rate and an area imaged during imaging operations involving the specific media.

30. A method according to claim 26, comprising:

for each of a plurality of different media types, providing a stored corresponding by-product generation rate per unit area; and

for each media type, adjusting the count based at least in part on the by-product generation rate associated with that media type and an area imaged during imaging operations involving that media type.

31. A method according to claim 30, comprising determining a capacity of the filtration element for a first media type based on an empirically determined capacity of the filtration element for a second media type and known differences between the media by-product generation rates associated with the first and second media types.

32. A method according to claim 31 comprising filtering by-products from a plurality of different media types imaged in subsequent imaging operations using the same filtration element.

33. A method according to claim 26, wherein maintaining a count indicative of a remaining capacity of the filtration element comprises maintaining an accumulated chronological time indicative of the time during which the filtration element has been installed in the system and wherein determining the remaining capacity of the filtration element based at least in part on the count comprises comparing the accumulated chronological time against a time limit.

34. A system for filtering an airflow containing imaging by-products, the system comprising:

a filtration unit having an inlet, an outlet and an air mover for generating the airflow between the inlet and the outlet,

a filtration element located in a path of the airflow between the inlet and the outlet; and

a memory device coupled to the filtration element for storing information indicative of a remaining capacity of the filtration element.

35. The system of claim 34 comprising a receptor configured to interface with the memory device.

36. The system of claim 34, wherein the filtration element comprises a sorbent.

37. The system of claim 35, wherein the memory device is configured to store information which is indicative of at least one of:

a filtration element type identifier;

a unique filtration element identification number;

a remaining capacity of the filtration element;

a maximum capacity of the filtration element;

an accumulated chronological time indicative of the time during which the filtration element has been installed in the system;

a maximum allowable chronological time; and

an indication of a rate at which a capacity of the filtration element is consumed.

38. The system of claim 37, wherein the receptor comprises a controller and the controller is configured to use the information stored in the memory device to determine at least one system operational state selected from:

a filtration element does not match a media that is to be imaged;

a filtration element has reached a predetermined fraction of its capacity;

a filtration element has reached its maximum capacity;

a filtration element has exceeded its shelf life;

a filtration element is not installed; and

a filtration element is installed incorrectly.

39. A system for filtering imaging by-products produced during an imaging operation, the system comprising:

means for generating an airflow carrying the by-products;

means for filtering the airflow to remove the by-products from the airflow;

means for detecting a flow rate of the air flow; and

means for determining an operational state of the system based at least in part on the detected flow rate.